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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,120	03/30/2001	Gabriel G. Montero	RSW9-2001-0063-US1	9260

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EXAMINER

GOLD, AVI M

ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/823,120	<b>Applicant(s)</b> MONTERO ET AL.	
	<b>Examiner</b> Avi Gold	<b>Art Unit</b> 2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This action is responsive to the application filed March 30, 2001. Claims 1-24 are pending. Claims 1-24 represent a method and apparatus for asynchronous time-based updates of http sessions.

#### ***Specification***

1. The disclosure is objected to because of the following informalities: status of related applications needs to be updated. Related application 09/822,967 is not mentioned in the specification. Appropriate correction is required.

#### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: Figure 2, reference characters 213, 215, 217, 232, 234-240, and 242. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the

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applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

3. Claim 21 objected to because of the following informalities: It should state that it is dependent on claim 18 not claim 17. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 17 recites the limitation "said JVMs" and "said HttpSession objects". There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 11-13, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abramson et al., U.S. Patent No. 6,539,494 further in view of Feit, U.S. Patent No. 6,178,439.

Abramson teaches the invention substantially as claimed including servers for Internet web sites (see abstract).

As to claim 11, Abramson teaches a method of a method of maintaining session data in a server system servicing a network, said server system maintaining state data pertaining to sessions, said method comprising the steps of:

(1) storing data for each session in a memory local to a server servicing said session (col. 4, lines 8-15, Abramson discloses an application server maintaining session data elements);

(2) writing a copy of said data for each said session stored in said local memory into a central memory accessible to all servers of said server system at designated times (col. 4, lines 5-16, Abramson discloses session data being backed up to a backup server when data is modified).

Abramson fails to teach the limitation further including the said designated times being a function of a predetermined time interval since a last write to said database of data for said sessions.

However, Feit teaches a session control for HTTP communications over the Internet (see abstract). Feit teaches the use of time intervals (col. 6, lines 7-13).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Abramson in view of Feit to use predetermined time intervals. One would be motivated to do so because it avoids writing a copy of the data too often and interfering with other processes on the network.

Regarding claim 12, Abramson teaches the method of claim 11 further comprising the step of:

(3) writing in said database a copy of said session data for each said http session at the time the http session is initiated (col. 4, lines 5-16).

Regarding claim 13, Abramson teaches the method of claim 11 wherein said server system services the World Wide Web (col.2, lines 59-65, Abramson teaches a server connected to the internet).

Regarding claim 16, Feit teaches the method of claim 11 wherein said time interval is configurable (col. 6, Feit teaches different embodiments with different configurations of time intervals).

Regarding claim 17, Abramson teaches the method of claim 11 further comprising the step of:

(4) polling said session objects stored in said memories local to said JVMs to determine if they have been updated since the last time step (2) was performed; and

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wherein, in step (2), only copies of said HttpSession objects that have been updated within said predetermined time interval are written to said database (col. 3, lines 24-30, Abramson discloses polling of each application server; col. 6, lines 50-67, Abramson discloses a backup server backing up tables with only updated information).

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abramson and Feit further in view of Prabandham et al., U.S. Patent No. 6,701,438.

Abramson teaches the invention substantially as claimed including servers for Internet web sites (see abstract).

As to claim 14, Abramson teaches the method of claim 11.

Abramson fails to teach the limitation further including the method of claim 11 wherein said server system comprises a plurality of Java Virtual Machines (JVMs) running on a plurality of servers, and wherein said data for said sessions comprises an HttpSession object of a Java servlet application program interface (API).

However, Prabandham teaches methods and apparatus for providing customizable security and logging modules in a server environment (see abstract). Prabandham teaches the use of Java servlets, dealing with http requests, in Java Virtual Machines on servers (col. 5, lines 42-67; col. 6, lines 1-7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Abramson in view of Prabandham to use Java Virtual Machines and sessions comprising an HttpSession object of a Java servlet API. One would be motivated to do so because it allows for dynamic content and interactivity.



10. Claims 1-10, 15, 18, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abramson, Feit, and Prabandham further in view of Ng et al., U.S. Patent No. 6,745,387.

Abramson teaches the invention substantially as claimed including servers for Internet web sites (see abstract).

As to claim 15, Abramson teaches the method of claim 14.

Abramson fails to teach the limitation further including the method of claim 14 wherein said Java servlet APIs are J2EE servlet APIs.

However, Ng teaches a method for using a transaction service synchronization interface to perform container internal state clean up after a transaction has completed (see abstract). Ng teaches the use of J2EE (col. 3, lines 8-28).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Abramson in view of Ng to use J2EE servlet APIs. One would be motivated to do so because it is a well-known and used platform for constructing Java technology based applications.

Claims 1-9, 18, 22, and 23 do not teach or define any new limitations above claims 11-17 and therefore are rejected for similar reasons.

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Regarding claim 10, Feit teaches the server system of claim 9 wherein said time interval is between ten seconds and five minutes (col. 6, lines 57-67, Feit discloses intervals at different times between 10 seconds and 5 minutes).

Regarding claim 19, Abramson teaches the server system of claim 18 wherein said second computer program is adapted to write said HttpSession object data to said database after X HttpSession updates in said local memory, where X is an integer greater than or equal to 2 (col. 6, lines 24-33, Abramson discloses updating of old session data).

Regarding claim 20, Abramson teaches the server system of claim 18 wherein said second computer program is adapted to write said HttpSession object data to said database after X http requests in said http sessions, where X is an integer greater than or equal to 2 (col. 2, lines 1-17, Abramson discloses that when session data is modified, a request is put in for it to be backed up).

Regarding claim 21, Abramson teaches the server system of claim 17 further comprising a third computer program adapted to store in said database a copy of said HttpSession object data for each said http session at the time the http session is created (col. 2, lines 1-17, Abramson discloses a backup server having a copy of the session).

Regarding claim 24, Prabandham teaches the server system of claim 18 wherein said writes to said database are performed at the end of a first servlet service method of a corresponding http session received after said designated time (col. 6, lines 8-14, Prabandham discloses an http response logged at the end of a servlet).

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,385,642 to Chlan et al.

U.S. Pat. No. 5,951,643 to Shelton et al.

U.S. Pat. No. 6,098,093 to Bayeh et al.

U.S. Pat. No. 6,052,730 to Felciano et al.

U.S. Pat. No. 6,615,235 to Copeland et al.

U.S. Pat. No. 6,308,212 to Besaw et al.

U.S. Pat. No. 6,684,390 to Goff.

U.S. Pat. No. 6,584,548 to Bourne et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Avi Gold whose telephone number is 703-305-8762.

The examiner can normally be reached on M-F 8:00-5:30 (1st Friday Off).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 703-308-7562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Avi Gold

Patent Examiner

Art Unit 2157

AMG

  
SALEH NAJJAR  
PRIMARY EXAMINER